

ABSTRACT OF THE DISCLOSURE

A method of handling data packets in a series of network switches is disclosed.

An incoming data packet is received at a data port of a first switch of the series of network switches and a stack tag is resolved from a header of said incoming data packet. It is then determined whether an incoming data packet is a unicast packet, a multicast packet or an IP multicast packet; and the address resolution lookup and layer three IP lookup tables are searched to find an egress port for said incoming data packet.

The packet header is modified and the packet is forwarded to at least a second switch of the series of network switches, on a stacked connection operating at a first data rate, based on the stack tag and the egress port. The header is later remodified when the egress port is one of a series of data ports of a particular switch of the series of switches.